REMARKS

A total of 31 claims remain in the present application. Reconsideration of this application is requested. By way of the foregoing amendments, claims 1 and 25-31 have been amended to more clearly define the subject matter of the present invention, and in response to the Examiner's objections. Paragraph 1 of the specification have been amended to address the Examiner's objections, and paragraph 40 has been amended to correct a typographical error. In preparing these amendments, careful attention has been paid to ensure that no new subject matter has been introduced.

Referring now to the text of the Office Action:

- The Examiner has objected to the Specification on grounds that Applicant's claim to priority of an earlier filed application is improper and that an attempt to incorporate subject matter by reference to United States Patent Application No. 09/742,310 is improper;

- Claims 25-31 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter;

- claims 1-6, 9-10, 12-22, 25-26 and 28-29 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,473,421(Tappan);

- claims 7-8,23-24 and 30-31 stand rejected under 35 U.S.C. § 103(a) as being obvious in light of United States Patent No. 6,473,421(Tappan) in view of applicant's admitted prior art; and

- claims 11, 18 and 27 stand rejected under 35 U.S.C. § 103(a) as being obvious in light of United States Patent No. 6,473,421(Tappan) in view of applicant's admitted prior art, and further in view of United States Patent No. 5,265,092 (Soloway)

It is believed that the Examiner's objections to the specification, and claim rejections are fully traversed by way of the above-noted amendments, and further in view of the following comments.

Objections to the Specification.

It is believed that the Examiner's objections to the Specification are fully addressed by the above-noted amendment of paragraph [0001] of the specification, to remove reference to prior United States Patent Application No. 09/742,310, which fell abandoned prior to filing of the present application.

Rejections under 35 U.S.C. § 101

It is believed that the Examiner's rejection of claims 25-31 under 35 U.S.C. § 101 is traversed by the above-noted amendments in claims 25-31.

Rejections under 35 U.S.C. § 102(e)

United States Patent No. 6,473,421(Tappan) teaches a hierarchical label switching scheme, in which labels stored in each router's forwarding table are formulated on hierarchies based on OSPF areas. "A border router transmits into the domain an OSPF LSA Update message containing an AS-External LSA whose External Route Tag field other routers interpret as specifying a label to be used for forwarding. When that LSA is flooded into the OSPF domain, area border routers respond by flooding new LSAs created from the received one by replacing the label contained in the External Route Tag field with labels that specify their forwarding tables' locations containing information for forwarding to the originating autonomous system border router. In so doing, they enable packets destined for an extra-domain location to be forwarded through the autonomous system without requiring non-border routers to allocate labels to the exterior location or to border routers outside their areas. This enables a networking backbone to conserve its label space even though it carries a large variety of external traffic." (abstract)

Thus, Tappan uses the External Route Tag to control how each router interprets a received LSA. More particularly, the content of the External Route Tag field is interpreted as specifying a label to be used for forwarding, so that non-border routers will forward traffic

destined for an extra-domain location to the autonomous system border router that originated the LSA. This effectively divides the network into areas, and reduces the label space required by each non-border router within each area, because they no longer need to store label information for every destination in the network. A single entry (to the appropriate ASBR) can be used for all traffic destined for a particular area.

However, Tappan does not teach or suggest that the content of the Route Tag field is used to control the propagation of the LSA itself, as in the present invention. Rather, Tappan modifies how the Route Tag field contents are interpreted and used for updating a router's forwarding table. Tappan also teaches how the Route Tag field contents of a received LSA are inserted into a new LSA that is subsequently flooded into the network. In all cases, however, the routers of Tappan exhibit conventional LSA-flooding behaviour, only the content (and interpretation) of the Route Tag field is changed.

In contrast, in accordance with the present invention, a Route Tag is asserted in respect of an LSA, and propagation of the LSA through the network is controlled based on the asserted Route Tag. For example, as described in paragraph 40 of the specification:

> ... a "Discard" policy may be defined for ABR(B) 8b having a match criteria corresponding to the address of ABR(A) 8a as the contents of the advertising router field 46, such that LSAs originating from ABR(A) 8a are discarded. Implementation of such a policy in ABR(B) 8b would mean that information concerning address and routes within Areas 0.0.0.1 4a and 0.0.0.2 4b would not be propagated into Area 0.0.0.3 4c, thereby ensuring that Areas 0.0.0.1 and 0.0.0.2 4a,4b cannot be accessed from Area 0.0.0.3 4c.

Thus it will be seen that the present invention modifies the LSA flooding behaviour of routers in the network. United States Patent No. 6,473,421(Tappan) does not teach this feature of the presently claimed invention, and thus reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e) is courteously requested.

Rejections under 35 U.S.C. § 103(a)

As discussed above, United States Patent No. 6,473,421(Tappan) does not teach or suggest all of the features of the present invention. The other known prior art references fail to provide the missing teaching. Applicant's admitted prior art describes well known LSA message types, and the use of LSAs to advertise explicitly defined exclusion routes (see for example, paragraph 11, and Co-assigned United States Patent Application No. 09/662,108). However, none of these teach or suggest policy-based control of LSA propagation, as provided by the present invention.

In light of the foregoing, it is submitted that the presently claimed invention is clearly distinguishable over the teachings of the cited references, taken alone or in any combination. Thus it is believed that the present application is in condition for allowance, and early action in that respect is courteously solicited.

If any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this response, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 19-5113.

Respectfully submitted,

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